

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P855653

Luminaire Tested: **12SFS-L3C4-UNV-HIGH-4000K**

Issue Date: 7/17/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P855653  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( BL231218002-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 12SFS-L3C4-UNV-HIGH-4000K  
Description: 1x2 Surround Frame Selectable - Architectural Slim LED Frame with,  
HIGH Lumen and 4000K CCT Settings  
Light Source: -  
Ballast/Driver: -

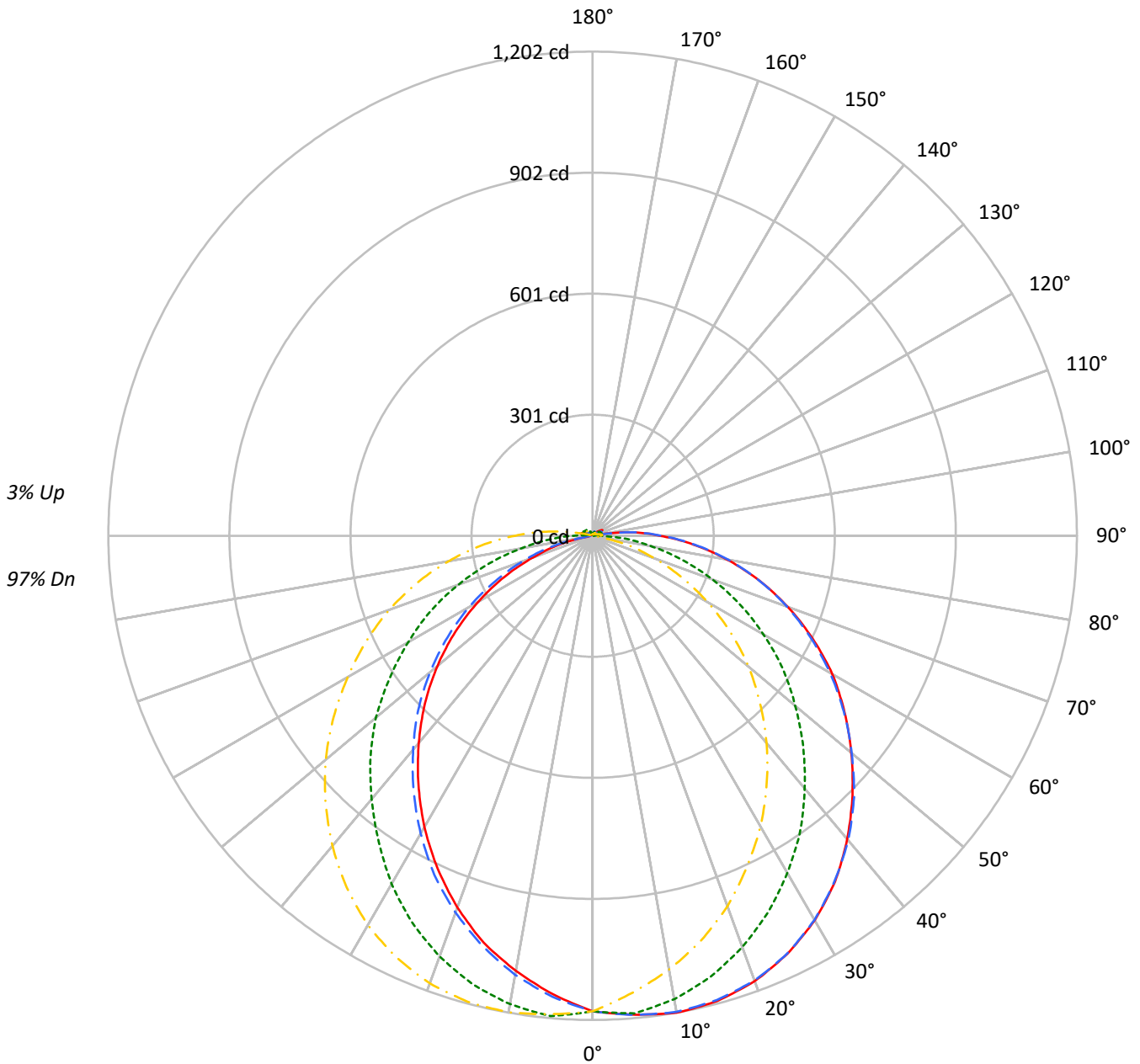
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3550.0 lumens  
Efficiency: N/A  
Efficacy: 126.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.92' x L: 1.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	97
1	107	102	97	93	104	99	95	91	94	91	88	90	87	84	86	83	81	81	81	81	79
2	97	88	81	75	94	86	80	74	82	76	72	78	74	70	75	71	68	68	68	68	65
3	88	77	69	62	85	76	68	61	72	65	60	69	63	58	66	61	57	57	57	57	55
4	81	68	59	53	78	67	58	52	64	57	51	61	55	50	59	53	49	49	49	49	46
5	74	61	52	45	72	60	51	45	57	50	44	55	48	43	53	47	42	42	42	42	40
6	69	55	46	39	66	54	45	39	52	44	38	50	43	38	48	42	37	37	37	37	35
7	64	50	41	35	62	49	40	34	47	39	34	45	39	34	44	38	33	33	33	33	31
8	59	45	37	31	57	45	36	31	43	36	30	41	35	30	40	34	30	30	30	30	28
9	55	42	33	28	54	41	33	28	40	32	27	38	32	27	37	31	27	27	27	27	25
10	52	38	31	25	50	38	30	25	37	30	25	35	29	25	34	28	24	24	24	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	7269	7269	7269	7269
5°	7377	7356	7061	7398
10°	7518	7302	6857	7382
15°	7623	7223	6667	7346
20°	7711	7120	6432	7280
25°	7777	7004	6190	7201
30°	7839	6873	5935	7095
35°	7884	6748	5666	6960
40°	7903	6583	5395	6858
45°	7942	6434	5125	6790
50°	8029	6287	4816	6724
55°	8194	6192	4463	6597
60°	8463	6028	4036	6509
65°	8764	5878	3511	6476
70°	9276	5682	2830	6372
75°	10168	5429	2098	6307
80°	11993	5152	387	6347
85°	17762	5694	586	7644



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.5	3.1
10°-20°	317.8	9.0
20°-30°	477.1	13.4
30°-40°	569.0	16.0
40°-50°	586.6	16.5
50°-60°	534.2	15.0
60°-70°	423.6	11.9
70°-80°	275.1	7.8
80°-90°	136.7	3.9
90°-100°	53.4	1.5
100°-110°	17.4	0.5
110°-120°	16.2	0.5
120°-130°	13.0	0.4
130°-140°	8.2	0.2
140°-150°	5.1	0.1
150°-160°	3.1	0.1
160°-170°	1.4	0.0
170°-180°	0.4	0.0
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0°-30°	906.5	25.5
0°-40°	1475.5	41.6
0°-60°	2596.3	73.1
0°-90°	3431.7	96.7
90°-120°	87.0	2.5
90°-150°	113.3	3.2
90°-180°	118.0	3.3
0°-180°	3550.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1180	1180	1180	1180	1180	
5°	1194	1190	1142	1197	1194	114
15°	1196	1133	1046	1152	1196	338
25°	1145	1031	911	1060	1145	528
35°	1049	898	754	926	1049	656
45°	912	739	588	780	912	705
55°	763	577	416	614	763	683
65°	602	403	241	444	602	596
75°	427	228	88	265	427	451
85°	251	81	8	108	251	223
90°	167	6	8	46	167	94
95°	98	2	26	14	98	60
105°	4	23	27	24	4	7
115°	19	20	7	24	19	18
125°	22	18	3	22	22	20
135°	8	14	3	20	8	7
145°	3	11	3	14	3	2
155°	3	10	3	11	3	1
165°	3	5	4	5	3	1
175°	3	4	3	4	3	0
180°	4	4	4	4	4	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5
5°	1193.5	1190.5	1193.9	1196.3	1190.1	1186.7	1138.5	1140.8	1142.3	1142.1	1148.7
10°	1202.4	1197.1	1200.3	1201.8	1167.9	1166.2	1093.5	1097.8	1096.7	1100.4	1106.8
15°	1195.8	1190.1	1192.8	1193.3	1133.0	1132.8	1040.1	1044.3	1045.8	1049.6	1054.8
20°	1176.7	1172.2	1174.9	1172.8	1086.5	1088.0	978.5	980.8	981.5	987.6	995.3
25°	1144.7	1141.3	1144.1	1140.8	1030.9	1033.2	906.3	911.2	911.1	920.5	929.1
30°	1102.5	1098.5	1101.0	1098.7	966.6	971.5	833.2	834.0	834.7	845.1	853.2
35°	1048.8	1047.3	1047.1	1045.0	897.7	900.9	753.3	753.3	753.7	765.8	774.6
40°	983.2	985.9	986.8	981.2	818.9	824.6	671.6	672.1	671.2	683.2	692.9
45°	912.0	916.0	917.7	909.9	738.8	744.9	587.3	590.5	588.5	597.5	612.0
50°	838.1	840.6	839.5	835.3	656.3	665.2	505.0	505.2	502.7	515.4	526.7
55°	763.3	763.0	761.1	754.7	576.8	580.2	417.6	416.8	415.7	429.2	439.8
60°	687.2	680.6	680.2	670.4	489.5	495.4	329.0	331.6	327.7	340.7	354.4
65°	601.5	598.1	596.6	593.7	403.4	411.0	244.0	243.1	241.0	255.5	266.1
70°	515.2	512.0	512.9	508.0	315.6	322.0	161.7	159.0	157.2	172.0	184.5
75°	427.4	426.6	426.8	419.6	228.2	235.0	91.8	92.1	88.2	100.4	107.2
80°	338.2	340.3	341.6	330.1	145.3	156.0	9.6	11.1	10.9	13.9	20.0
85°	251.4	253.8	254.6	245.9	80.6	88.6	5.8	8.1	8.3	8.1	7.0
90°	167.1	170.5	171.1	162.4	5.8	7.3	19.2	8.1	7.5	7.5	13.8
95°	98.4	102.3	100.2	94.4	2.1	8.3	23.9	24.9	26.2	24.7	25.8
100°	14.3	7.5	7.0	6.6	17.5	18.1	20.2	24.1	29.2	27.3	25.4
105°	4.5	5.3	5.1	9.0	23.2	20.2	14.3	21.7	26.6	25.4	19.0
110°	4.0	4.7	17.3	18.3	21.7	17.7	9.8	15.1	17.1	16.8	14.3
115°	19.4	22.4	23.7	18.7	20.0	16.2	9.0	7.3	6.6	8.3	13.9
120°	28.6	23.0	18.7	16.4	18.7	15.5	8.5	6.8	2.6	7.5	13.0
125°	21.9	17.7	11.7	14.7	17.7	14.1	7.5	6.6	2.6	7.3	11.5
130°	15.8	13.6	8.5	14.1	15.8	10.9	8.9	6.0	2.8	7.2	9.8
135°	7.7	9.0	8.7	13.9	13.9	10.9	9.0	5.7	2.8	6.4	8.9
140°	2.8	8.7	9.0	12.4	12.8	10.7	8.5	5.3	2.6	5.8	7.9
145°	2.8	8.1	7.5	11.1	11.3	7.7	6.6	4.9	3.0	5.5	7.3
150°	2.8	7.3	10.4	9.2	11.3	6.2	5.3	4.0	3.0	4.9	5.8
155°	2.8	6.8	11.1	9.8	10.2	3.8	3.8	3.4	3.0	4.1	5.3
160°	3.2	6.0	9.6	10.4	5.8	4.1	3.2	3.0	3.0	3.4	4.3
165°	3.2	5.3	7.7	8.9	4.9	3.4	3.4	3.4	3.6	3.8	3.6
170°	3.0	4.3	5.8	6.8	4.9	3.4	3.4	3.4	3.2	3.4	3.2
175°	2.8	3.8	4.1	3.6	3.8	3.8	3.4	3.0	3.0	3.0	3.2
180°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1180.5	1180.5	1180.5	1180.5	1180.5	1180.5
5°	1150.6	1196.9	1192.8	1192.2	1193.3	1193.5
10°	1109.7	1180.7	1178.3	1201.2	1202.4	1202.4
15°	1060.1	1152.3	1150.4	1197.7	1196.5	1195.8
20°	998.9	1111.0	1110.8	1182.6	1180.1	1176.7
25°	929.1	1059.9	1060.5	1154.3	1150.0	1144.7
30°	855.9	997.9	1003.4	1116.1	1110.2	1102.5
35°	776.7	925.9	935.7	1065.0	1060.7	1048.8
40°	695.7	853.2	861.3	1004.9	999.6	983.2
45°	611.6	779.7	782.2	937.3	930.1	912.0
50°	529.3	701.9	702.8	864.9	856.8	838.1
55°	442.1	614.5	617.7	784.6	776.9	763.3
60°	353.5	528.5	534.2	701.3	694.7	687.2
65°	265.9	444.5	445.6	620.3	611.6	601.5
70°	183.2	353.9	361.0	536.3	527.0	515.2
75°	107.4	265.1	274.7	450.5	441.5	427.4
80°	27.3	179.0	189.4	362.5	353.5	338.2
85°	9.6	108.2	114.6	277.7	266.1	251.4
90°	10.7	46.2	48.4	192.2	180.7	167.1
95°	20.7	14.1	9.6	116.8	108.3	98.4
100°	22.8	6.0	13.4	39.6	32.2	14.3
105°	22.0	23.6	21.3	6.0	5.1	4.5
110°	21.1	25.1	19.6	6.8	4.0	4.0
115°	20.2	24.5	20.4	20.9	20.5	19.4
120°	19.2	22.0	19.4	22.0	24.7	28.6
125°	16.8	21.7	18.3	20.5	21.1	21.9
130°	13.2	20.9	17.3	14.5	17.3	15.8
135°	11.7	20.4	14.9	14.5	9.0	7.7
140°	10.7	16.0	13.0	13.8	7.0	2.8
145°	7.9	14.1	11.1	11.3	6.8	2.8
150°	6.6	12.1	13.0	10.0	6.2	2.8
155°	5.7	11.3	10.9	10.2	5.8	2.8
160°	5.3	5.8	10.0	9.2	5.5	3.2
165°	3.6	4.9	8.3	7.3	5.1	3.2
170°	3.2	5.3	6.6	6.2	4.5	3.0
175°	3.8	4.1	5.5	5.3	4.0	2.8
180°	3.5	3.5	3.5	3.5	3.5	3.5



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°









(END OF REPORT)